(p=0.0079). **Conclusion :** Our data in unselected population of MI patients indicate for the first time that IFG is associated with an increased mortality rate, which is mainly due to an higher risk for developing cardiogenic shock during in-hospital stay .

1021-97 Impact of Diabetes Mellitus on Thrombolysis in Myocardial Infarction Risk Score, Procedural Utilization, and Clinical Outcomes in Minorities and Women as Compared to White Men With Non-ST-Segment Elevation Acute Coronary Syndrome

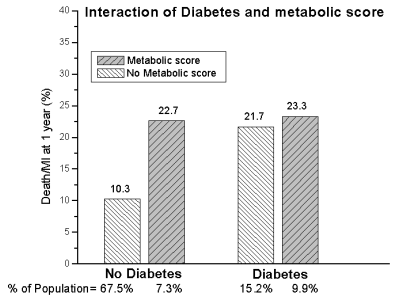
Muhammad Rizwan Khalid, Fawad Kazi, Justin Brezina Lundbye, Anita M. Kelsey, Raymond G. McKay, Roger Mennett, William E. Boden, University of Connecticut Health Center, Farmington, CT, Hartford Hospital, Hartford, CT

Introduction: It is well-recognized that diabetics with coronary heart disease , compared to non-diabetics, are at significantly increased risk for subsequent cardiac events, but it is unclear whether diabetics who present with non-ST-segment elevation (NSTE) acute coronary syndrome (ACS) have differential rates of procedural utilization, TIMI Risk Score (TRS) and clinical outcomes among various gender and racial subsets. Accordingly, the purpose of the present study was to assess TRS, procedural utilization rates of cardiac catheterization, and clinical outcomes using composite major adverse clinical events (MACE) for diabetic and non-diabetic subsets of whites, non-whites, men and women patients hospitalized with NSTE ACS.
Methods: A total of 2,432 NSTE ACS patients could be classified according to the published TIMI risk score. Clinical outcomes using a MACE composite (death, MI, stroke, need for urgent revascularization) were assessed for diabetic and non-diabetic subsets of varying race and gender.
Results: Diabetics presented with a significantly higher TRS when compared to non-diabetics (4.02 vs. 3.56; P<0.001). Non-diabetics underwent more cardiac interventions compared to diabetics (P<0.05). However, as expected, diabetics were more likely to experience MACE (P<0.05) when compared to non-diabetics during follow-up ranging from 30-180 days. Diabetics who did not undergo cardiac catheterization had a significantly higher incidence of MACE (P<0.01) compared to non-diabetics, but there was no significant gender and racial differences in MACE rates in the diabetic subgroup.
Conclusion: Although diabetic patients who present with NSTE ACS have significantly higher TIMI Risk Scores at hospitalization and higher MACE during follow-up compared to non-diabetics, our single-site experience revealed that there were no significant gender or racial differences noted among white and non-white men or women. Paradoxically, we noted that diabetic patients with NSTE ACS were less likely to undergo cardiac catheterization than non-diabetics, but importantly, diabetics who did not undergo cardiac catheterization appeared to fare worse than those who underwent intervention.

1021-98 Is Metabolic Dysfunction Equivalent to Diabetes as a Prognostic Marker in Acute Coronary Syndrome?

Pedro Araujo Goncalves, Jorge Ferreira, Luis Raposo, Carlos Aguiar, Ricardo Seabra-Gomes, Hospital de Santa Cruz, Carnaxide, Portugal

Background: Diabetes mellitus (D) is a known prognostic marker in patients with acute coronary syndromes (ACS). Recently, a constellation of lipid and non lipid risk factor linked to insulin resistance was described and termed metabolic syndrome. We have previously demonstrated the independent prognostic value of a metabolic score (MS), but Its interaction with D, as a prognostic marker in ACS, is not yet established.
Methods: We studied 302 patients with non-ST segment elevation ACS. A MS was calculated using the following variables collected on admission: obesity (BMI>30Kg/m2); Blood pressure>130/85mmHg; Triglycerides>150mg/dl; HDL<40mg/dl (or <50mg/dl in women); blood glucose >or= 110mg/dl. With the cut-off identified for the MS (>3 variables), we divided our population into 4 groups: D & MS; D & No MS; No D & MS; No D & No MS. The endpoint used was the combined incidence of death and myocardial infarction at 1 year follow-up.
Results: Patients D & MS (n=30) had the highest study endpoint (23.3%), and the lowest incidence was 10.3% for No D & No MS (n=204). The incidence of the study endpoint was similar in the other 2 groups: 22.7% for ND & MS (n=22) and 21.7% for D & NMS (n=46).
Conclusions: The presence of metabolic dysfunction in non-diabetic patients, was associated to a poorer prognosis, as observed in diabetic patients. In patients with diabetes, detection of metabolic dysfunction, as evaluated with the best cut-off for this score, seems to add no aditional prognostic information.



1021-99 Metabolic Syndrome: A Major Risk Factor for Acute Myocardial Infarction in Patients < 45 Years of Age

Carlo Luciano, Jacqueline Hulford, Arif Abdullah, Stuart Zarich, Bridgeport Hospital, Bridgeport, CT, Yale University School of Medicine, New Haven, CT

Introduction: Premature coronary artery disease (CAD) is not fully explained by traditional global risk scores. Less than 25% of young adults with acute myocardial infarction (MI) meet NCEP III criteria for pharmacotherapy. As insulin resistance is associated with an increased risk of myocardial infarction (MI), we hypothesized that the metabolic syndrome (MS) is a major unrecognized risk factor for MI in young patients. Methods: We studied 196 consecutive patients (<45yrs old) with acute MI treated at Bridgeport Hospital from January 1999 through July 2003. MI was defined as both ST elevation or non-ST elevation MI by the usual criteria. MS was defined according to NCEP III guidelines (≥ 3 of five criteria with a body mass index >30kg/m2 substituted for waist circumference). Results: For the entire cohort the mean age was 41.3 years, with a BMI of 29.8, LDL of 124 mg/dl, HDL of 36 mg/dl and triglycerides of 216 mg/dl. Of the 165 patients in whom all 5 criteria for MS were evaluable at or before the time of MI, 63(38%) met the diagnostic criteria for the MS in the absence of diabetes (DM). An additional 38 patients (23%) had newly diagnosed or previously recognized DM. A history of cigarette use was seen more frequently in non-MS as compared to MS patients (81% vs 66%; p=0.01), while a family history of accelerated CVD, total cholesterol, and LDL levels were similar in both groups. Only 19% met MS criteria based on an elevated fasting glucose. The mean 10 year Framingham risk score in non-diabetics was 9.3% (only 17.1% had scores greater than 20%). Conclusion: MS and/or overt DM are present in nearly 2/3 of young patients with acute MI. The presence of the MS should alert physicians to the need for aggressive risk factor and lifestyle modifications, even in the absence of high global risk scores.

1021-100 Metabolic Syndrome: An Underecognized Risk Factor for Myocardial Infarction in the Young

Patrick J. Curran, Eugene H. Chung, Manish S. Chauhan, Christopher T. Pyne, Thomas C. Piemonte, David E. Gossman, James Waters, Seth Bilazarian, Khether Raby, Nabila Riskala, Richard W. Nesto, Lahey Clinic, Burlington, MA

Background: Risk factors for coronary heart disease (CHD) typically associated with acute myocardial infarction (MI) in the young (< 45yrs of age) are smoking and familial hypercholesterolemia. We hypothesized that metabolic syndrome (MS) is an underrecognized major risk factor in these patients.
Methods: We studied 132 consecutive young patients with acute MI (ST and non ST elevation) treated with primary percutaneous intervention at Lahey Clinic from June 2001 to May 2003. Of the 132 patients studied, 85 had all 5 necessary variables to determine the presence of metabolic syndrome. Metabolic syndrome was defined by meeting 3 (or greater) of 5 criteria as outlined by NCEP. Body Mass Index (BMI) greater than 28.8kg/m2 was substituted for waist circumference.
Results: 50 of 85 (58.8%) patients met the NCEP diagnostic criteria for metabolic syndrome. Of these 50 patients, 4 had prior history of diabetes. Twelve (26%) new diagnoses of diabetes were made in those with metabolic syndrome. Of the other 35 patients, two had a prior history of diabetes and two new diagnoses of diabetes were made. The mean Framingham Risk Score for those patients with MS was 6 and for those without MS was 5.
Conclusion: Metabolic syndrome is an underrecognized global risk factor for the development of myocardial infarction. Metabolic syndrome is highly prevalent in young patients with MI. Conventional risk assessment tools may not adequately identify “global” coronary risk in such patients.